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DUTCH MANUFACTURING MNES IN THE UNITED STATES, 1950-1995

by

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Abstract:

This paper explores the importance of Dutch investments in the US manufacturing industry over the period 1950-1995.Until the mid-1970s Dutch investments, though considerable, were primarily concentrated in the petroleum sector and therefore natural-resource seeking in nature. Dutch MNEs have gradually expanded their operations in the US in response to the changing competitiveness of the US relative to the Netherlands. The extent and structure of Dutch value-adding activities in the US reflect the changing motives for the investments. Dutch FDI activity has gone from trade-supportive in the 1950s and 1960s, to import-substituting and market-seeking in the 1970s, and rationalized and efficiency-seeking in the 1980s. There are also indications of strategic asset-seeking FDI activity in the late 1980s and early 1990s in line with the developments associated with the age of alliance capitalism. In the early 1980s, the Netherlands was the largest investor in the US, but both the UK and Japan have taken over this position since. Dutch investments show a reorientation towards Europe with the increasing importance of the EU, and although the Netherlands still lists high on the ranks of competitive countries, the Ownership advantages of Dutch firms have declined relative to those of UK and Japanese firms.

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INTRODUCTION

Although the Netherlands, as with most small open economies, is highly internationalised, its multinational enterprises (MNEs) are spread across a greater variety of sectors and are engaged in a greater extent of foreign value-adding activities than most other small economies. The Netherlands accounted for 5.8 percent of the total worldwide stock of foreign direct investment (FDI) in 1995, while MNEs from Sweden and Switzerland, two other small economies that are also highly internationalised, accounted for about 2.3 percent and 4.0 percent respectively (UN 1996). Furthermore, the activities of Dutch firms are considerably more internationalised than that of firms from most other countries, in terms of the geographic distribution of their subsidiaries, with overseas markets in some instances accounting for well over 70 percent of their sales. Furthermore, they are engaged in much 'deeper' overseas investments in terms of types of value adding activity: while most MNEs concentrate their high value adding activity (such as R&D) at home, Dutch MNEs conduct half their total R&D activities outside their home country (Patel 1995).

The process of globalisation - here defined as the increasing convergence of income levels, consumption patterns and technological levels of the industrial countries - has been associated with an increase in the preference for MNEs from the industrial countries to concentrate their overseas value-adding activities in other converging economies (Dunning and Narula 1997). In line with this, Dutch MNEs have been increasing their presence in the rest of the Triad, and away from developing countries. One of the primary destinations of Dutch FDI has been the United States (US), which, apart from purely historical factors, has also, both due its market size, as well as by being a source for natural and technological assets, continued to attract a large share of Dutch FDI. Indeed, the US accounted for approximately 25.9 percent of its total outward FDI stock in 1994 (OECD 1996). Dutch MNEs share this interest in the US with many other advanced industrial economies**,** as the US is the largest single destination for inward FDI. What is perhaps more interesting is that Dutch MNEs are amongst the largest inward

investors in the US, far exceeding all other countries of equivalent size. At its peak in 1980, Dutch FDI represented almost a quarter of all inward stock in the US. In manufacturing investment, Dutch FDI in the US reached its peak as the largest inward investor in the manufacturing sector in 1984, with 24.1 percent of all inward manufacturing stock.

These almost incomprehensibly large figures notwithstanding, there have been considerable dynamic changes taking place within the activities of Dutch MNEs on a sectorally desegregated level, as well as relative to the activities of its international competitors that deserve deeper analysis and further comment, some of which shed light on the changing competitiveness of Dutch MNEs. For instance, although the share of the Dutch FDI stocks in 1995 was 12.1 percent and was exceeded only by the United Kingdom (UK) and Japan, and was in fact almost equal to that of France and Switzerland combined, on the other hand, this share was less than half of its level in 1981 (24.7 percent). Since 1981 the share of the UK, Germany, France, and Japan had continued to rise steadily. Furthermore, the Dutch position in the manufacturing sector, while not unimpressive, has also declined. Some of this is change could be attributable to socio-economic developments associated with the European Union causing an increased preference for intra-European FDI and therefore a reorientation of Dutch investments towards Europe and away from the US. Naturally, these same changes should have affected firms from other European economies as well. However, there is some evidence that Dutch firms have responded differently from the other European countries. Despite their significant share of manufacturing FDI, relative to German, Swiss, and UK MNEs, Dutch firms have not expanded their US activities, and may even be said to have a much weaker position than previously.

It should be noted that the phenomenon of Dutch MNE activity is dominated by a relatively small number of very large firms. As such, any analysis of Dutch FDI and its use as a measure of Dutch industrial competitiveness must be made with caution, since the weak performance of 2 or 3 of these large firms can adversely affect the performance indicators used here, much more so than say, UK or Germany, although the situation is somewhat similar in the case of Switzerland. As such our analyses continually draws on a comparison between several countries.

We start with a discussion of the changing motivations of inward FDI into the US. Sequentially, an overview of MNE activity in the US is presented. After that, we evaluate how Dutch FDI has changed over the period 1950-1995, focussing on understanding the changes in the Locational (L) advantages of the US relative to those of the Netherlands, and the Ownership (O) advantages of Dutch MNEs. Throughout comparison is made to MNEs from other European countries. Conclusions are given in the final section.

FDI IN THE US: UNDERSTANDING CHANGING MOTIVATIONS

During most of the post-war era, the US has played host to a large share of total world-wide stock of inward FDI. Indeed, statistics indicate that it has been the largest single host country throughout most of this century (Wilkins 1989, Dunning 1988). This is not altogether surprising, given its large market size, both in per capita and in absolute terms. Indeed, what is peculiar is that on a per capita basis, the US has received a relatively lower level of FDI than other countries at similar level of development, and of more limited market potential (Dunning 1993b). Numerous studies have been undertaken on understanding the determinants of FDI in the US, both empirical and qualitative (see e.g., Grosse and Trevino 1996, Graham and Krugman 1994, Dunning and Narula 1994) and we will not attempt to summarise these here, except to observe that these determinants indicate that changes in FDI in the US have been driven by economic imperatives, as well as what might best be described as strategic factors.

The economic factors are both push and pull. The 'pull' factors represent those identified in the traditional economics literature, such as market access, reduction of risk, access to immobile resources, overcoming trade and non-trade barriers, etc., and are well-documented in the literature. The literature on internationalisation has explained that firms tend to first enter overseas markets through trade-supportive investments, in the situation where barriers to imports prevail, through import-substituting investment, and where immobile assets need to be utilised, through natural-resource seeking investment. As has been demonstrated elsewhere (e.g. Dunning 1993b, Dunning and Narula 1994) much of the inward FDI into the US in the post-war period was initially of these types.

Although European (and particularly Dutch) firms have been present in the US market for a considerable while longer, the majority of such investment was also of these types. It was only much more recently that inward FDI activity has expanded towards high-value adding activity and gradually becomes increasingly embedded in the US economy, and that firms have moved towards efficiency-seeking FDI in the US. This has much to do with the tendency towards rationalisation and globalisation of production among the Triad and by firms from the Triad occurring over the post war period. This has made it possible for firms to achieve economies of scale and scope on a Triad-wide basis.

Despite the increasing similarities across countries, there remains distinct sectoral and technological specialisation in terms of competitive advantages by firms in particular regions and countries (Archibugi and Pianta 1992). Firms seeking access to complementary assets and competitive advantages that are associated either with the competitiveness of the location or with the competitive advantages of the firms located there, have been 'pushed' to engage in outward FDI in order to do so. This in turn has led to a concentration of value-adding activities on a world-wide basis in particular locations which reflects the advantages of each region or location. This dynamic has been further enhanced by the declining barriers to trade and investment amongst and between the Triad economies, and a corresponding relative decline in trade and investment with much of the developing world. Inward FDI in the US has, since the late 1970s, seen considerable investment by MNEs seeking to achieve such efficiency, and MNEs have gradually increased the extent and range of their value adding activities in the US.

At the same time as this increasing rationalisation along economic lines, there has also been a growing use of strategic asset-seeking activity by MNEs[1]. By 'strategic' we mean activities which affect the long term product-market positioning of firms such that they improve the firm's value without necessarily reducing net costs in the short term. Investments are made by firms to acquire assets which are specific to other firms or locations. Strategic asset-seeking activity has been noted to be a phenomenon also closely associated with globalisation, and is increasingly prevalent over the last decade or so (Dunning and Narula 1995, 1996). Strategic asset seeking MNE activity has occurred through new modes of investment, such as through the use of strategic alliances and mergers and acquisitions (M&A). Over the period 1989 to 1995, 80 percent of investment

outlays in the US have been through acquisitions rather than greenfield investment, the majority of which (72.8 percent) were conducted through existing US affiliates.

It is important to note that the changing structure of FDI activities of foreign firms reflects the evolving economic structure of the US and that of the various home countries, and that these changes represent 'exogenous' factors. In particular, the shifting focus of MNE activities over the past 50 years from manufacturing to services represents a gradual evolution, over time typical of most advanced industrial economies[2].

ROLE OF FDI IN THE US

Although prior to 1980 no figures were provided regarding the share of foreign affiliates in the US economy, successive surveys published by the Department of Commerce during the post war period indicate that foreign-owned establishments have played a relatively insignificant role in the US economy with the exception of the chemicals sector, where by 1974 12 percent of the US gross product in that sector was accounted for by foreign-owned affiliates (McClain 1983: 284). By 1977 inward investors accounted for no more than about 2 percent of total non-bank employees. However, foreign MNEs did have a larger influence on US exports and imports. Foreign MNEs accounted for 20.0 percent of US exports, and 28.0 percent of US imports in that same year. The high share of exports was attributed to large grain exports by foreign-owned firms. A substantial portion of US imports consisted of motor vehicles and metals and minerals, and affiliates were relatively highly concentrated in those two wholesale trade industries (Howenstine 1980).

By 1980, foreign affiliates employed 1.1 million employees, just 5.5 percent of the total manufacturing employment in the US. Overall, FDI activities of foreign firms in the US experienced a sudden surge of inward investment activities in the early 1980s, which has continued since then. Graham and Krugman (1991) argue that when the ratio of FDI flows to GNP is examined, there is little evidence of a sudden surge, but rather of a long term trend of an expanding role of foreign firms in the US economy, similar to that typical of other advanced industrial economies. By 1990 foreign firms accounted for 10.6% of total employment and their importance as employers continues to rise both in

absolute and relative terms. By 1994, foreign affiliates employed 2.1 million people which was 11.8 percent of the US workforce in that year (Fahim-Nadir and Zeile 1996, OECD 1994).

The most recent attempt to evaluate the significance of foreign-owned firms to the US economy on an aggregate basis has been summarised in two articles published in the Survey of Current Business[3]. Table 1 summarises some of the most salient facts from these surveys, extended by some more general information of FDI activity in the US around the same time.

In 1990, foreign-owned firms accounted for 13.4 percent of the total value added by US manufacturing industry. The analysis by the Department of Commerce suggests that foreign affiliates are relatively more efficient than US based firms - foreign-owned firms utilise larger plant scale, their employees are paid better and are more productive than the average US firm (Table 1). However, they are also concentrated in just a few sectors. Foreign-owned MNEs are particularly dominant in food and kindred products, printing and publishing, chemicals, stone, clay and glass products, electronics and electrical equipment, and transportation equipment. In only the chemicals and stone, clay and glass products sectors is the foreign share over a quarter of total value added in the US.

In terms of country differences, although Dutch firms have a considerable share of the activities of foreign-owned affiliates in the US, these are concentrated in even fewer sectors, namely food and kindred products, chemicals, and electronic and electrical equipment (Table 2). It is interesting to note, however, that the majority of Dutch FDI activity is not in the manufacturing sector. In 1990, the share of manufacturing in total FDI stock was only 38.6 percent compared to 58.6 percent, 46.0 percent, 55.4 percent, and 73.2 percent for Switzerland, the UK, Germany and France, respectively. It is also pertinent to note that although Dutch total investments in the mentioned manufacturing sectors are relatively large, their contribution to the US economy is not equally important. For example in the chemical sector, the Swiss investment position was only a third of that of the UK and the Netherlands, yet its contribution to total foreign value added in the US was 4.2 percent, compared to 3.3 percent for the Netherlands and 5.7 percent for the UK in 1991. Germany's 1990 FDI stock in chemicals was comparable to that of the

Table 1 Evidence on the Role of Foreign Affiliates in the US Economy

	All countries	France	Ger-many	Nether-lands	Switzer-land	UK
Number of Industries (SIC, four digit), 1991	410	160	174	98	NA	272
FDI Position, Year end 1990, historical cost basis	396702	18665	28309	63938	17745	102790
Manufacturing	157431	13669	15695	24717	10393	47304
Share in Total Investment						
Manufacturing	39.7	3.4	4.0	6.2	2.6	11.9
Food and Kindred		0.4	0.0	1.9	D	2.2
Chemicals		9.6	2.1	2.1	0.8	3.4
Primary and Fabricated Metals		D	0.3	0.4	D	0.8
Machinery		D	0.8	1.0	0.7	1.2
Other manufacturing		1.0	0.7	0.9	0.4	3.4
Share in country total						
Manufacturing	39.7	73.2	55.4	38.7	58.6	46.0
Food and Kindred	5.8	8.0	0.4	11.6	D	8.4
Chemicals	11.6	21.8	29.3	12.7	18.4	13.1
Primary and Fabricated Metals	3.9	D	4.2	2.2	D	3.2
Machinery	6.9	D	11.7	6.2	16.0	4.7
Other manufacturing	11.5	20.8	9.7	5.9	7.9	16.6
Plant scale, 1991 (thousands of US$)						
Us Owned Establishments	3373	3977	2914	3811	NA	3342
Foreign Owned Establishments	19209	15957	24035	25753	NA	14336
Production worker wages per hour (US$), 1991						
Us Owned Establishments	11.37	11.66	11.43	11.61	NA	11.53
Foreign Owned Establishments	12.87	13.36	13.30	12.00	NA	11.87
Number of Establishments, 1990	11934	1217	1045	618	697	3291
Share in all countries	100	10.2	8.8	5.2	5.8	27.6
Number of Employees, 1990	2004235	178324	229007	123424	133934	456618
Share in all manufacturing employment US	10.64	0.95	1.22	0.66	0.71	2.42
Output per production worker per hour, 1991, (US$)						
Us Owned Establishments	115	133	100	122	NA	120
Foreign Owned Establishments	182	160	165	210	NA	168
Value-Added in Foreign Establishments (Million US$) 1990	177360	15390	20442	11648	14829	40325
Share per industry						
All manufacturing	13.4	1.2	1.5	0.9	1.1	3.0
Food and Kindred Products	13.8	0.8	0.3	2.1	2.8	4.1
Printing and Publishing	10.1	0.5	1.2	0.5*	D	2.8
Chemicals and Allied products	31.9	1.9	6.1	3.3	4.2	5.7
Stone, Clay, and Glass products	24.8	6.6	1.8	0.5	1.5	5.1
Electronic and otherelectric equipment	15.6	0.8	2.1	2-3*	0.7	2.4
Transportation equipment	4.9	0.5	0.2	<0.05*	D	0.8

Source: Howenstine and Shannon, 1996; Howenstine and Zeile, 1994; US Department of Commerce, various years * authors estimate, # Survey of Current Business, August 1992

Netherlands, but its contribution to total foreign value added in that same year was almost twice as large. While the Netherlands has had a large influence based on historical investments, in most sectors other countries like the UK and Japan, and even other small open economies like Switzerland, now have a larger influence on the US economy. Further details are set out in Table 1.

DUTCH MNE ACTIVITY IN THE US

This section gives an overview of Dutch FDI activity in the US. The analysis is divided over three time periods. The first period, 1950-1972, covers the time after World War II up to the termination of the Bretton Woods agreement. The second period covers the years 1973-1979, when there was a large increase in investment activity in the US due to the increased liquidity position of European countries after the abolition of the gold standard. The last period covered is 1980 to 1994, when investments in the US have come to maturity.

Dutch MNEs in the US: 1950-1972[4]

At the end of the second world war, the US was at the height of its technological and economic hegemony. The war had left most European and Japanese firms with limited financial resources that were primarily devoted to the process of reconstructing their domestic production capacity. Moreover, their O advantages were severely depleted, particularly their technological assets, and they were in no position to compete with the US MNEs who were expanding into Europe after the war, much less invest in US production facilities, where costs were among the highest in the world (Dunning and Narula 1994). The shortage of capital also led to home government regulations that severely limited capital exports. Despite this, outward FDI stocks[5] in the US had exceeded their pre-war level of US$1.8 billion in 1937, to US$3.4 billion in 1950. Much of this investment was dominated by the UK, Canada and the Netherlands which controlled 34.4 percent, 30.3 percent, and 9.8 percent of the total inward FDI stock in 1950 (Table 2). In terms of manufacturing FDI share, Canadian firms accounted for 41.1

percent of all inward manufacturing FDI stock, while the UK and the Netherlands accounted for 29.6 percent and 3.9 percent respectively (Table 2). Most of the Dutch FDI stake was in the petroleum sector, where Dutch FDI represented 55.8 percent of the total inward FDI in that sector in 1950. Data for 1950 is relatively sparse, but the evidence indicates that Dutch manufacturing firms had a very small presence in the US, compared to MNEs in other countries. Although these figures are in current terms the changing significance can be gauged from the fact that Swiss firms' manufacturing FDI stocks were five times that of Dutch firms in that year, although in terms of total FDI stocks they had almost exactly the same value.

Although inward FDI into the US continued to grow at a rapid rate through much of the 1950s and 1960s, reaching US$6.9 billion in 1960 and US$13.3 billion by 1970, the situation remained much the same. In terms of relative share of total FDI, the Netherlands was still the third largest investor overall, following the UK and Canada. However, Dutch investment continued to be concentrated in the petroleum sector, particularly given the continued expansion of Shell into the US market after the war.

In the first survey of post-war assets of foreign investments in 1959 (US Department of Commerce 1962), FDI in the manufacturing sector represented 22.1 percent of the outstanding Dutch FDI stock in the US in that year, compared with 47.8 percent for Canada, 55.2 percent for Switzerland, and 32.2 percent for UK. In absolute terms, Dutch stocks were still much lower than those from other MNE home countries. The manufacturing stock of the UK was 3.5 times that of the Netherlands, though UK firms' manufacturing sales were only 1.6 times as high. A similar comparison for Switzerland gives corresponding ratios 2.0 for stocks and 0.7 for manufacturing sales. Although some of this discrepancy can be attributed to the use of historical cost basis for estimating stocks, thereby causing investments of earlier vintage to be understated, both the UK and Switzerland had been significant investors at about the same level of the Netherlands for about as long. This would indicate that either the O advantages of Dutch manufacturing MNEs were much superior to those of Swiss and UK MNEs, particularly with regard to utilising a much higher scale of production, or they were involved in a much higher level of intra-firm trade.

Table 2 Stock and Share of Inward FDI in the US, 1950-1979

(million US$ and percentage shares)

	1950	1955	1960	1965	1967	1970	1972	1979
All areas								
Total investment	3391	5079	6910	8797	9923	13270	14868	54462
Canada								
Total investment	1029	1541	1934	2388	2575	3117	3466	7154
Share in total inward FDI in US	30.3	30.3	28.0	27.1	25.9	23.5	23.3	13.1
SMTI*	45.5	46.1	48.2	51.0	54.3	58.9	63.5	50.5
SMDMI**	41.1	40.4	35.7	35.0	33.4	29.9	30.3	17.3
Netherlands								
Total investment	334	613	947	1304	1508	2151	2357	12672
Share in total inward FDI in US	9.8	12.1	13.7	14.8	15.2	16.2	15.9	23.3
SMTI	13.2	20.7	22.5	25.2	25.7	30.3	32.6	27.6
SMDMI	3.9	7.2	8.2	9.4	9.3	10.6	10.6	16.7
Switzerland								
Total investment	348	522	773	940	1096	1545	1675	3449
Share in total inward FDI in US	10.3	10.3	11.2	10.7	11.0	11.6	11.3	6.3
SMTI	58.6	54.0	55.2	62.8	67.9	74.2	71.3	66.1
SMDMI	17.9	16.0	16.4	17.0	17.8	18.7	16.4	10.9
UK								
Total investment	1168	1749	2248	2852	3156	4127	4987	9796
Share in total inward FDI in US	34.4	34.4	32.5	32.4	31.8	31.1	33.5	18.0
SMTI	28.9	29.2	32.1	29.4	32.0	33.7	34.5	36.2
SMDMI	29.6	29.0	27.7	24.1	24.1	22.7	23.7	17.0
Japan								
Total investment	na	na	88	118	108	229	-154	3493
Share in total inward FDI in US	na	na	1.3	1.3	1.1	1.7	-1.0	6.4
SMTI	na	na	na	47.5	59.3	30.6	-46.8	19.9
SMDMI	na	na	na	1.6	1.5	1.1	1.0	3.3

Source: US Department of Commerce, Selected data on Foreign Direct Investment in the United States1950--79; Foreign Direct Investment in the United States: Balance of Payments and Direct Investment Position Estimates, 1980-1986; Foreign Direct in the United States, Operations of US Affliliates of Foreign Companies, revised estimates for several years.

* Share manufacturing in total investment (SMTI)

** Share of manufacturing in total direct manufacturing investment in the US (SMDMI)

Dutch FDI in manufacturing had begun to grow quite rapidly during the latter half of the 1960s (Table 2). Between 1965 and 1970, Dutch manufacturing FDI grew at an average annual rate of 19.7 percent. While this partly reflects its low base, it would indicate that the O advantages of these MNEs were improving vis-a-vis those of their European competitors. This was the largest growth rate amongst the significant inward investors to the US - the next highest growth rate was exhibited by Swiss FDI at 18.8 percent over the same period. This evidence would seem to indicate that the O advantages of Dutch MNEs were in the ascendancy, relative to those of UK, Swiss and

Canadian firms. By 1971 the share of manufacturing in the total inward FDI stocks of the Netherlands, Canada, Switzerland and the UK were 31.3 percent, 60.3 percent, 71.3 percent and 35.2 percent respectively. It is not the objective of the current chapter to delve into the reasons for this growth. Suffice to say, this recovery represents the effect of several different factors. First, there was a return of investors, who had had investments prior to the war, which had either been sold off, sequestered, or neglected, and this growth simply represented a reinstatement of these activities (US Department of Commerce 1962). Second, the importance of the US as a destination for exports of Japanese and European firms led to trade-supportive investments - the GDP of the US was 1.8 times that of the six founding members of EEC[6] in 1960.

Third, the US represented an important source of various sorts of natural resources, particularly petroleum and various agricultural products[7] such as soy beans, and investment undertaken in the primary sector often led to upstream vertical investments in the manufacturing sector. In the 1959 benchmark survey, 44.8 percent of total sales of foreign affiliates in manufacturing were in the food and beverages industry. Fourth, there had been a recovery of the O advantages of European MNEs in sectors in which they had traditional strengths such as pharmaceuticals, chemicals and non-electrical machinery. The last two sectors tend to involve high transportation and shipping costs, and significant economies existed through local production, and accounted for 25.8 percent of manufacturing sales in 1959. In general, though, the US market was served by non-US firms through exports rather than through hierarchies, with exports to the US growing at an average annual rate of more then 85 percent between 1948 and 1960 for the Netherlands[8], 4.7 times the growth rate of FDI stock. The volume of Dutch exports (US$ 208.0 million) to the US was almost equal to Dutch FDI stock in manufacturing in the US (US$ 213.0 million) in 1960.

Unfortunately, data on sub-sectors in manufacturing are not available on a country-by country basis for the years after 1959. Basing our analysis on a comparison between data for 1959 and 1973[9], however, the evidence would indicate that the most important sectors for Dutch MNEs were food and kindred products, chemicals and electrical machinery. Indeed, these were the same sectors in which the Netherlands had a comparative advantage in exporting.

Nonetheless, the importance of FDI remained relatively insignificant compared to the US economy, relative its market potential and relative their overall FDI outflows of their home countries. The general liquidity problem, and the shortage of dollars meant that FDI in the US was primarily supported through reinvested earnings. For instance, between 1960 and 1970, 55.2 percent of change in total FDI stocks occurred through reinvested earnings, and 51.0 percent in manufacturing. The ratio for the Netherlands was 74.1 percent and 53.0 percent, respectively (US Department of Commerce 1984). In terms of FDI stock as a percentage of US GDP, Dutch FDI grew from 0.07 percent in 1960 to 0.10 percent in 1970. Overall, much of Dutch FDI was of a trade-supportive nature, given the advantages of Dutch firms.

Dutch MNE activity in the US: 1972-1980

The termination of the Bretton Woods agreement, which led to the abolition of the gold standard and the subsequent introduction of floating exchange rates boosted the liquidity position of the major investing economies. There was a subsequent explosion of FDI activity on a global basis, with worldwide total outward FDI stocks increasing from US$211.1 billion in 1973 to US$551.0 billion in 1980. This represented a average annual growth rate of 15 percent, outstripping worldwide GDP and world trade during this period (Dunning 1993). Outward FDI from the Netherlands grew at approximately this rate, although its relative share in the US increased only marginally from 7.5 percent to 7.6 percent.

Although the US was no longer the largest host country in terms of inward FDI stock by the early 1970s - inward FDI stock in the US in 1973 was US$20.6 billion, while that in the UK was US$24.1 billion - it was still pre-eminent since it was still the single largest homogenous market. With the exogenous shocks of the early 1970s, particularly due to the change in the exchange rate mechanism[10], FDI flows to the US increased dramatically.

As such, in contrast to the previous decades, during the period 1972 to 1980 reinvested earnings accounted for only 33.3 percent of the increase in inward FDI stock. In manufacturing, only 32.4 percent of growth in FDI stock was through reinvested

earnings. Dutch manufacturing FDI into the US grew at twice the rate of total outward Dutch and worldwide FDI stocks (Narula 1996)[11], but still slower than Dutch petroleum inward FDI into the US.

The cost of production in most of the home countries (which, with the exception of Canada, were all European) also began to rise considerably, as productivity growth of most Northern European economies began to slow (van Ark and de Jong 1996), 'pushing' out European MNEs, particularly towards the US. The Netherlands was no exception to this process, with manufacturing GDP increasing by less than 0.2 percent between 1973 and 1979 (van Ark 1995). However, using a basis of value added per person employed in manufacturing, van Ark and de Jong (1996) illustrate that between 1973 and 1979, Dutch productivity relative to that of the UK, France and Germany was 16-23 percent higher, but relative to the United States, it was 13-18 percent lower. This would indicate that the Dutch MNEs were relatively more efficient than their main European rivals, but much less so than US firms.

In terms of sectoral specialization, Dutch manufacturing FDI in 1979 continued to be concentrated in food and kindred (31.4 percent of total foreign investment in food and kindred in the US), chemicals (12.2 percent of total investment in that sector) and machinery (20.0 percent of total investment in that sector). However, in both the chemical and the machinery sector, Dutch MNEs were slowly losing their prominent position by the end of the 1970s. In the same sectors the importance of the UK was increasing. Both the UK and Germany were rapidly increasing their position with primary and fabricated metals. Swiss MNEs, though making a small contribution to total investment, were rapidly catching up, with new investments growing at a much faster rate than most other countries in both the primary and fabricated metals and the machinery sector.

FDI stock to export ratios for the end of this period reveal that the Netherlands were serving the US market mainly from their US affiliates (ratio equals 2.8) and not through exports. The ratio was particularly high in the chemical (6.1) and machinery (2.2) sectors. For most other countries the pattern was exactly the opposite. Exports are more than twice as large as total stock for Germany and France, and about 25 percent larger than stock for the UK. However, Switzerland shows a pattern similar to that of the

Netherlands - the stock to exports ratio equals 1.5 with a similarly high ratio across all sectors except machinery. Overall, total investments in the US increased rapidly, suggesting that the relative L advantages of supplying goods made by EC firms from a US location increased substantially over this period (Dunning 1993b).

Coming to maturity: 1980--1994

With the rising O advantages of non-US firms, the improving L advantages of the US as a manufacturing base for these firms led to a swell of foreign investments in the US. By 1983, the share of manufacturing value added of the US economy accounted for by foreign affiliates had risen to 7 percent. There were two aspects to this growth. First, the US continued to represent an important market for most firms from industrialized countries. Indeed, Rosenzweig (1994) estimates that at least 20 percent of the revenues of most European and Japanese MNEs derive from their North American operations. This is particularly true in the case of Dutch MNEs, which, like MNEs from other small countries, tend to be much more internationalized than firms from countries with larger home markets (Narula 1996). Furthermore, Dutch FDI tends to be dominated by a relatively small group of large MNEs. Firms such as Philips and Akzo are amongst the most internationalized MNEs, with over 90 percent of their sales, and well over 80 percent of their production being undertaken abroad (UN 1996). Table 8.3 shows that between 1980 and 1986 The Netherlands' overall investment position in the US increased, though its share in total is declining from 23.1 percent in 1980 to 18.5 percent in 1986. Large new investments are made in the food and kindred sector (share of food and kindred in all Dutch manufacturing FDI in the US increases to over 36.8% in this period). However, the relative shares of both the chemical and the machinery sectors are declining. Over the same period, the UK rapidly increased its share in total investment.

However, while it is true that the US remains an important market, European integration and the overall economic catch-up of European economies had meant that European MNEs in particular were now faced with a choice of investing and rationalizing their production activities in an integrating Europe or expanding their US presence. Not surprisingly, many firms preferred to focus on Europe, given that it represented an

Table 3 FDI Position of Major European Home Countries

(stock, share per sector and share of sector in total FDI, 1980 and 1986)

Year	Country		All Industries	Petroleum	Manufacturing	Food and Kindred	Chemicals	Primary and Fabricated Metals	Machinery	Other Manufacturing	Finance, Insurance, Real Estate	Other
1980	France	Total stock	3731	42	2291	111	633	555	61	932	119	1279
		SAAFDI*	4.49	0.34	6.94	2.28	6.06	15.52	0.87	13.07	0.88	5.26
		ICTOTAL**				4.85	27.63	24.23	2.66	40.68		
1986		Total stock	7709	D	7195	372	4287	652	242	1643	1501	D
		SAAFDI*	3.50	D	10.00	3.06	18.68	8.95	2.10	9.11	3.33	D
		ICTOTAL**				5.17	59.58	9.06	3.36	22.84		
1980	Germany	Total stock	7596	95	3887	43	1815	333	832	864	1216	2398
		SAAFDI*	9.15	0.78	11.77	0.88	17.39	9.31	11.89	12.11	8.99	9.87
		ICTOTAL**				1.11	46.69	8.57	21.40	22.23		
1986		Total stock	17250	45	7426	36	3961	161	2035	1232	1633	8146
		SAAFDI*	7.83	0.15	10.32	0.30	17.26	2.21	17.62	6.83	3.62	10.97
		ICTOTAL**				0.48	53.34	2.17	27.40	16.59		
1980	The Netherlands	Total stock	19140	9265	4777	225	2002	170	1094	1287	2164	2934
		SAAFDI*	23.05	75.94	14.47	4.62	19.18	4.75	15.64	18.04	15.99	12.07
		ICTOTAL**				4.71	41.91	3.56	22.90	26.94		
1986		Total stock	40717	11481	13293	4890	3457	493	1732	2722	7449	6151
		SAAFDI*	18.47	40.61	18.47	40.26	15.06	6.77	15.00	15.09	16.52	10.03
		ICTOTAL**				36.79	26.01	3.71	13.03	20.48		
1980	Switzerland	Total stock	5070	43	3116	586	1154	264	681	430	907	1004
		SAAFDI*	6.11	0.35	9.44	12.04	11.05	7.38	9.74	6.03	6.70	4.13
		ICTOTAL**				18.81	37.03	8.47	21.85	13.80		
1986		Total stock	12058	39	7520	D	2137	D	941	1401	2455	2044
		SAAFDI*	5.47	0.13	10.45	D	9.31	D	8.15	7.77	5.44	2.75
		ICTOTAL**				D	28.42	D	12.51	18.63		
1980	United Kingdom	Total stock	14105	-257	6166	1098	2301	524	1103	1140	3834	7273
		SAAFDI*	16.98	-2.11	18.68	22.55	22.04	14.65	15.77	15.98	22.34	20.33
		ICTOTAL**				17.81	37.32	8.50	17.89	18.49		
1986		Total stock	55935	11758	16500	2899	5906	782	2338	4575	13218	14459
		SAAFDI*	25.38	40.41	22.93	23.87	25.73	10.74	20.25	25.37	29.31	19.47
		ICTOTAL**				17.57	35.79	4.74	14.17	27.73		

Source: US Department of Commerce

all italics are 1985 data

underlined are data for 1981

*Share in All Areas FDI per industry

**Share of Industry in country total

increasingly homogenous market about the same size of the US. Furthermore, these firms were already considerably more familiar with Europe, and as such presented a potentially more profitable option for these firms. As Table 4 shows, the share of outward FDI

stocks to the US accounted for by the total outward stock outstanding of some major European home countries declined during the second half of the 1980s, and this decrease has been mirrored by a corresponding increase in the share of Europe, with the exception of Switzerland, which was already heavily involved in European markets.

Table 4 Share of Outward FDI stock from major home countries to Europe and the US

	% of stock in US		% of stock in Europe	
Country	1985	1994	1985	1994
Netherlands	41.0	25.9	32.8	45.9
Germany	30.3	21.1	43.8	60.6
Switzerland	29.0	24.5	50.5	49.6
United Kingdom	36.6	31.5	27.8	38.0
France	26.3	20.8	58.4	62.8

Source: OECD International Direct Investment Statistics. Table 8, various countries.
Note: for Switzerland, North America = US.

Overall, FDI activities of foreign firms in the US experienced a sudden surge of investment activities in the early 1980s, which has continued until the mid 1990s. This sudden surge of investment, as well as a chronic (and huge) balance of payments problem prompted considerable concern amongst policy makers and the general public alike, leading to, among other things, various legislative actions including the Exxon-Florio amendment and the increased monitoring of foreign-owned affiliate activity by government agencies (Graham and Krugman 1991).

Indeed, the increased protectionism (and in many instances, the threat of protectionism) displayed by the US led to even further investment by foreign firms, who wanted to avoid being discriminated against, relative to domestic firms. They did so in order to pre-empt attempts to limit manufacturing imports (through inter alia, voluntary export restrictions) as well as attempts to regulate and increase local-content requirements for foreign (but especially Japanese) firms. This situation was not improved by an overvalued US dollar. In other words, the L advantages of the US were artificially enhanced in the early- and mid-1980s by non-tariff barriers and changing macroeconomic factors. Dutch investments continued to grow, although in terms of total share of inward FDI from all countries it reached its peak at 24.1 percent in 1981, gradually declining ever since then. In the manufacturing sector, Dutch MNEs became the largest single

foreign direct investors in the US in 1981, with a share of 22.2 percent of total inward FDI stocks[12], overtaking the UK in that year. Dutch FDI maintained its pole position in the manufacturing sector until 1985. In fact, Dutch inward FDI stock grew at almost the same rate between 1980 and 1985 (26.0 percent) as it had between 1975 and 1980 (29.6 percent). However, in terms of overall growth rates, Dutch FDI was clearly overshadowed by the growth of Japanese FDI in the US, which experienced growth rates twice those of most other countries, albeit from a low base.

The Plaza accord in 1985, which led to a devaluation of the US dollar against the currencies of its major trading partners, improved the competitiveness of US firms relative to the exports of its major international competitors. In 1985 and 1986 the yen, the pound and the German mark rose by 29.4 percent, 26.2 percent and 12.5 percent respectively against the US dollar. This had the effect of raising the costs of exports to the US, and spurred further investment into the US by most European firms. Indeed, manufacturing sales of foreign affiliates grew at 6.7 percent between 1981 and 1983, and increased to 10.6 percent between 1983 and 1987. However, it is interesting to note that Dutch sales grew at a negative rate between 1981 and 1983, but grew at 11.6 percent between 1983 and 1987. Between 1983 and 1987, Swiss and UK manufacturing sales exhibited growth rates of 15.9 percent and 19.2 percent, respectively.

Growth of the US economy had stalled, relative to that of much of Europe during the period 1979 to 1987. GDP per capita growth of 'Northwest' Europe[13] during this period was 1.7 percent compared to 1.5 percent for the US. This implied that the relative attraction of the US had decreased, with the development of the single market, encouraging European firms to invest in the EC rather than in the US. Indeed, manufacturing exports to the US from the 5 major European home countries - Netherlands, UK, Germany, France, and Switzerland increased at 13.1 percent, 22.0 percent, 29.8 percent, 21.0 percent and 20.6 percent respectively between 1983 and 1987, higher than the growth rates of manufacturing sales of US affiliates over the same period.

For several European countries the ratio of the sales of US affiliates to US imports from the home economy (hereafter sales to imports ratio)[14] has been calculated and is reported in Table 5. The ratio is used as a proxy for the propensity to supply the US market with sales from the affiliates that are located in the US, rather than by exports

from the home country. Although the sales to imports ratio of most EU countries did in fact decline between 1983 and 1987, it is important to realize that these figures mask important differences between industries. For instance, this sales to imports ratio in the food and kindred products and chemicals sector increased between 1983 and 1987, while electrical machinery declined. These are three of the most important sectors for Dutch MNEs, which together accounted for 75.8 of total investment in manufacturing in 1986. It is important to note the magnitude of the sales to imports ratio as well as the direction of change. For instance, in 1987, Dutch firms revenues in chemicals were 10.7 times that of the total imports from the Netherlands in that sector, compared to, say, the food sector where the ratio was 1.5. This indicates that given the relatively high levels of imports and sales, and the vintage of the investments, chemical firms were relatively decentralized in their production activities across countries, and that their US operations were 'stand-alone'. In other words, these firms were engaged in a much higher level of value adding activities in the US, than say German and French MNEs. Also, across sectors, the low ratio for food and kindred sector for Dutch firms relative the UK indicates that Dutch firms rely on intra-firm trade much more to supply the US market, indicating a much stronger interdependency within these firms. This probably indicates that Dutch firms were much more rationalized on a worldwide basis, while the Swiss and UK firms were utilizing more of a multi-domestic strategy[15].

The sales to imports ratio also indicates that there were considerable attractions of the US as a production site relative to other locations in the chemicals industry of Dutch MNEs. However, this is not entirely true for chemical firms of all nationalities. The sales to imports ratio in chemicals fell for Swiss and German firms, both relatively large players in the chemicals sector. It did, however, rise for UK firms, and given that MNEs from the Netherlands and the UK were the most internationalized in terms of geographical spread and overseas value added activity, it might indicate the presence of certain O advantages, particularly those associated with the economies of common governance, as well as what is sometimes referred to as the experience effect (Yu 1992). In other words, the decline of the sales to imports ratio for foreign owned firms in the US for manufacturing represented a decline in both the L advantages of the US and the strength of the O advantages of foreign firms[16]. The ratios of the other sectors tell a

similar story.

It would seem that Dutch MNEs were undertaking a change in their inter-dependence between their US affiliates and their parent organizations -the ratio of manufacturing affiliate exports to imports increased from 39.4 percent in 1985 to about 81.9 percent in 1992 (US Department of Commerce 1988,1995). The propensity of Dutch affiliates to import from the Netherlands did not change very much, but we see an increasing propensity to export to the parent organization. This clearly indicates that an increasing integration was taking place between the US affiliates and the rest of the MNE organization. It is also worth noting that imports exceeded exports since 1977 (the year in which data on this variable has been systematically been collected), but that the ratio of imports to exports has consistently declined for Dutch MNEs, while this ratio for the UK has tended to be about equal and has not substantially changed over time (Zeile 1993).

After reaching its peak in terms of share of total inward FDI in the US, Dutch FDI began to slowly decline, in terms of relative manufacturing share from 16.6 percent to 10.2 percent between 1987 and 1995. Although this in part represents the growing importance of Japanese FDI, it is significant to note that the Dutch position in manufacturing FDI had already been surpassed in terms of stock (on a historical cost basis) by the UK in 1986 and Germany and France were rapidly catching up. In terms of sales, the Dutch position had been surpassed by most other European countries by then as well. By 1994, the share of manufacturing sales of Germany, France, Switzerland, and the UK are 2.7, 2.0, 1.6, and 3.9 times larger than Dutch manufacturing sales respectively. Japanese MNEs were also catching up with total manufacturing stock being slightly (6.0 percent) smaller than Dutch manufacturing stock in 1994, although total FDI stock was 46.0 percent larger than that of Dutch MNEs. It is also important to note that in terms of growth rates, Dutch FDI manufacturing sales grew at 13.9 percent between 1987 and 1992, but displayed negative growth of 0.7 percent between 1992 and 1994, the latest year for which sales data are available.

The lackluster performance of Dutch MNEs relative to all MNEs, which displayed corresponding growth rates of 18.3 percent and 10.2 percent, has partly to do with the high concentration ratio of Dutch manufacturing firms (Table 1). Much of FDI is accounted for a small group of parent firms, Philips, Akzo-Nobel, Unilever, and Shell,

who are heavily involved in large mergers and acquisitions (M&A)[17]. It also, to some extent, reflects the restructuring of Dutch firms in response to increased competition by other European firms and the increasing presence of Japanese competitors in their principal markets[18]. However, such pressures also affected MNEs from Switzerland, Germany, UK and France. The sales to imports ratio of the Netherlands' manufacturing (Table 5) increased from 4.2 to 6.2 between 1987 and 1992, but fell to 5.2 by 1994. Although the same ratio also decreased for the UK and Switzerland during this last period, the drop was relatively insignificant, indicating that for Dutch firms the L advantages of a US production base had initially risen, but had fallen again, and those of the US relative to the UK and Switzerland had been almost unaffected. This is partly reflected in the higher growth of GDP per capita of the Netherlands (2.1 percent) compared to the US (1.6 percent) between 1987 and 1994[19], whereas that of Switzerland and the UK grew at a much lower rate of 0.3 percent and 1.3 percent respectively. It is to be noted that the countries with relatively 'new' MNEs - Germany and France - have much lower sales to export ratios for manufacturing - the extent of local production was less than twice that of exports in most cases, and indicates that these firms were undertaking a lower extent of value added in the US. For instance, although German manufacturing sales in 1989 were about 2.0 times that of Dutch firms, the ratio of value added was 1.8 in 1990. These 'new' MNEs are at a much earlier stage of internationalisation, and as such tend to depend more on their parent groups than more established MNEs, who also tend to be more embedded in the host country's domestic economy. The imports from the parent companies of German firms were worth about 29.8 percent of sales as opposed to 17.1 percent for Dutch firms, and 7.9 percent for UK firms in 1992. As such, it might be argued that these firms were at an early stage of import-substituting investment, and had not fully rationalised their US activity.

On a desegregated level, much of the decline in sales of US affiliates of Dutch firms was associated with the food products sector, and reflects strong competition resulting on the US market, resulting in low prices as well as the sale of a plant by Koninklijke Gist Brocades N.V. to the Canadian firm Lallamand in 1994[20], while electrical machinery and chemicals both increased their sales to export ratio, albeit relatively slowly during the most recent period, while the ratio of non-electrical machinery experienced a sudden decline. This is probably the result of Philips' disposal

of the Blockbuster video chain in 1993[21]. What does contrast with this is the behaviour of the other countries (Table 5) where, with a few exceptions, such as the continuous decline of electrical machinery in the UK, and the decline of electrical machinery during the most recent period for France, all the rest of the sectors in all the other countries

Table 5 Sales over Imports[a], several years, several countries

Country	Year	All industries	Total manufacturing	Food and kindred	Chemicals	Primary and fabricated metals#	Non-Electrical machinery	Electrical machinery	Total machinery	Other manufacturing
France	1983	6.7	2.2	1.2	1.2	1.5	1.0	0.5	0.8	3.8
	1987	4.2	1.7	1.1	1.5	0.7	*	*	1.9	1.9
	1992	6.1	2.8	2.0	4.9	7.5	0.5	5.0	1.6	2.5
	1994	6.8	3.2	2.4	5.5	5.1	1.2	2.7	1.7	2.6
Germany	1983	4.0	1.9	0.4	10.4	1.1	0.9	1.8	1.3	0.7
	1987	2.7	1.1	0.2	6.6	1.7	0.3	1.9	0.7	0.5
	1992	4.4	1.9	0.7	6.3	2.6	0.7	1.9	1.1	1.1
	1994	4.6	2.0	0.7	6.3	2.7	0.9	2.8	1.5	1.1
Netherlands	1983	15.9	4.4	1.3	8.9	*	0.5	*	*	2.0
	1987	11.8	3.9	1.6	10.7	0.3	0.3	*	*	1.1
	1992	17.2	6.2	4.8	15.4	1.3	*	*	5.3	1.9
	1994	16.6	5.2	2.4	17.9	0.8	0.4	8.9	5.2	1.2
Switzerland	1983	13.6	5.1	*	14.0	*	1.2	2.8	1.5	1.2
	1987	9.7	4.6	*	9.8	4.3	*	*	1.0	*
	1992	13.3	6.5	90.0	9.9	8.0	*	*	5.3	1.3
	1994	11.9	6.2	71.8	10.3	6.9	*	*	4.1	1.7
United Kingdom	1983	8.1	3.4	12.6	6.0	1.6	2.0	2.6	2.2	2.3
	1987	7.3	3.2	11.3	9.3	3.4	0.8	1.5	1.0	2.7
	1992	10.3	5.0	15.9	10.3	5.3	1.2	1.3	1.2	5.8
	1994	10.5	4.6	17.9	11.3	5.1	1.6	0.9	1.3	4.1

Source: US Department of Commerce; Benchmark Surveys; Foreign Direct Investment in the United States, Operations of US Affiliates of Foreign Firms, various issues, U.N. Commodity Trade Statistics, various years.

[#] Primary and fabricated metals: data 1986 used instead of 1987 for the Netherlands

[a] Ratios are calculated dividing the sales of the foreign affiliates in the US by US commodity imports from the home country of the affiliate.

have shown consistent growth. This would imply that either the L advantages of most of the other European countries had been declining relative to the US while that of the Netherlands had been improving, or that the competitiveness of Dutch manufacturing MNEs had reduced relative to those of their (US and European) competitors. There is clearly some truth in both of these factors. Evidence on the growth of real gross hourly

wages indicates that as a location, the Netherlands was a much more competitive location to engage in production relative to other Northwest European location, since wages increased at 0.2% between 1987 and 1994, while that of North-western Europe increased at 1.4 percent (van Ark and de Jong 1996). Data on relative productivity also confirms this, and the fact that Dutch productivity in manufacturing, albeit lower than US productivity was showing signs of catching up, compared to its European competitors.

Table 6a Intrafirm imports, several countries, 1982, 1987 and 1992

Country	Year	All indus-tries	Manufac turing	Share of mfg in total	By foreign parent group	%	By other foreigners	%	By foreign affiliates	%
France	1983	3575	1838	51.4	2657	74.3	918	25.7		
	1987	4330	1773	40.9	3264	75.4	1066	24.6	365	8.4
	1992	8275	5391	65.1	4673	56.5	3602	43.5	1104	13.3
Germany	1983	8722	2289	26.2	7073	81.1	1649	18.9		
	1987	17264	4312	25.0	14999	86.9	2265	13.1	360	2.1
	1992	19029	8054	42.3	15422	81.0	3608	19.0	591	3.1
Netherlands	1983	4309	884	20.5	1237	28.7	3072	71.3		
	1987	4268	1443	33.8	1687	39.5	2580	60.4	77	1.8
	1992	7968	2891	36.3	4297	53.9	3671	46.1	837	10.5
Switzerland	1983	2125	719	33.8	1184	55.7	941	44.3		
	1987	4269	1632	38.2	3258	76.3	1011	23.7	27	0.6
	1992	5290	2914	55.1	3877	73.3	1413	26.7	98	1.9
UK	1983	7961	1861	23.4	3236	40.6	4725	59.4		
	1987	10622	3339	31.4	4980	46.9	5643	53.1	110	1.0
	1992	12241	6042	49.4	6804	55.6	5437	44.4	514	4.2

Source: US Department of Commerce; Benchmark Surveys, various issues; Foreign Direct Investment in the United States, Operations of US Affiliates of Foreign Firms, revised 1982 estimates.

On the other hand, the declining share of Dutch manufacturing FDI, as well as the slow growth rates of Dutch manufacturing sales in the US indicate that there was also a decline in their O advantages. Although, given the highly rationalized nature of Dutch MNEs, it might be expected that Dutch MNEs were now supplying their US market with cheaper substitutes produced in Eastern Europe, less than 1.3 percent of the Dutch outward FDI stock in Europe was located in Eastern Europe (OECD 1996). Furthermore, were this the case, we would expect to see a rise in intra-firms imports from "other affiliated firms", which excludes those from the parent of the MNE. Although the share of such imports as a percentage of total intra-firm imports by Dutch affiliates increased from 1.8 percent in 1987 to 10.5 percent in 1992, this also includes intra-firm imports by

firms in the petroleum sector (Table 6a).

Furthermore, there has been a gradual decline in the expenditures on manufacturing plant and equipment expenditures. As a percentage of total plant and equipment expenditures by foreign affiliates, the Netherlands has fallen from 4.6 percent in 1983 to 3.5 percent in 1994, while that of the UK has gone up from 15.3 percent to 19.2 percent over the same period. In fact, in 1994 only 16.1 percent of all plant and equipment expenditures were made in manufacturing, compared to 41.7 percent for the UK (Table 6b).

Table 6b Property, Plant and Equipment

		Gross Property, Plant & Equipment	Manufacturing	% Manufacturing in total expenditure
France	**1983**	14682	5810	39.6
	1987	17945	8942	49.8
	1992	42986	26114	55.5
	1994	47189	28078	54.9
Germany	**1983**	22042	13787	62.5
	1987	25342	15845	62.5
	1992	52182	29154	52.2
	1994	64679	34834	51.2
Netherlands	**1983**	38250	4267	11.2
	1987	45954	5617	12.2
	1992	58913	10262	16.5
	1994	63229	10663	16.1
Switzerland	**1983**	10110	6235	61.7
	1987	13202	9325	70.6
	1992	24330	18088	69.8
	1994	24988	20399	77.0
UK	**1983**	47187	14122	29.9
	1987	62056	21897	35.3
	1992	99863	48205	41.9
	1994	125271	58341	41.7

Source: US Department of Commerce, Benchmark Surveys, various issues; Foreign Direct Investment in the United States, Operations of US Affiliates of Foreign Companies, revised 1983 estimates; preliminary 1994 estimates

What of the argument that Dutch FDI activity has been in the process of global rationalization and gradually moved towards sectors and activities which are technology intensive? In fact, Dunning and Narula (1995) show that overall, Dutch R&D intensity, when measured as a ratio of R&D expenditures to sales[22], after having risen from 0.9 percent in 1977 to a peak of 1.1 percent in 1985, have fallen consistently every year, and in 1994 stood at 0.8 percent. while figures for manufacturing are not available across all

years, even in the sectors in which the Netherlands has traditionally held competitive advantages, food products, chemicals and electrical machinery, the R&D intensities in 1994 (Table 7) were 0.1 percent, 2.2 percent and 2.5 percent while those for the UK were 0.7 percent, 4.3 percent and 3.3 percent, and for Germany, 0.2 percent, 4.6 percent and 6.2 percent[23] respectively. This is particularly indicative of the O advantages of Dutch MNEs, given the following facts. First, that in terms of patenting activities large Dutch MNEs (which dominate Dutch FDI) undertook 57.8 percent of their patenting activities in overseas R&D labs, of which 26.1 percent was undertaken in the US (Patel 1995)[24]. Second, data from a cross-European survey indicate that in general firms located in the Netherlands are less innovative, in terms of 'new' innovations than their counterparts in 5 other European countries[25] (Kleinknecht 1995).

Table 7 R&D intensity, percentage shares, 1994

Industry	France	Germany	Netherlands	Switzerland	United Kingdom
All industries	1.25	1.61	0.81	3.15	1.02
Manufacturing	2.64	3.27	2.02	5.12	2.26
Food and kindred products	0.40	0.23	0.11	D	0.72
Chemicals	3.51	4.57	2.21	10.76	4.32
Primary and fabricated metals	1.06	0.85	0.88	0.86	0.67
All machinery	3.86	3.53	2.45	2.16	1.64
Non-electrical machinery*	D	1.25	0.71	D	1.00
Electrical Machinery	D	6.16	2.51	D	3.34
Other manufacturing	2.06	1.69	0.73	D	1.22

Sources: U.S. Department of Commerce, Foreign Direct Investment in the United States, Operations of US Affiliates of Foreign Companies, preliminary 1994 estimates
* Germany's R&D intensity in electical and non-electrical machinery given for 1992

In general, therefore, it can be said that much of Dutch FDI in manufacturing was in a market-oriented, efficiency seeking mode. In an age where most global firms are increasingly utilizing organizational modes that provide more flexibility, such as networks and strategic alliances, Dutch firms were also increasingly engaged in strategic asset-seeking activity[26]. As has been noted elsewhere (Narula and Dunning 1997), globalized firms tend to increasingly utilize non-majority owned activity, often through strategic alliances to develop and sustain competitive advantage. There is some indication of a growing tendency among Dutch MNEs to use an increasing amount of non-majority owned affiliates. Although UK firms have also exhibited a similar decline, between 1992

and 1994 MNEs from Germany, Switzerland and France have not changed their preference for wholly owned firms. There has also been a growing propensity to use mergers and acquisitions rather than greenfield investments. In the case of Dutch firms, 73.0 percent of all investment outlays between 1992 and 1995 had been made to acquire existing US establishments.

CONCLUSIONS

The evidence presented here may be summarized succinctly as follows:

1. Dutch FDI activity, though considerable, was primarily concentrated in the petroleum sector until the mid 1970s. In the manufacturing sector, Dutch MNEs, as was the case with MNEs in general, had not played such a significant role in the US economy until the 1980s. Dutch MNEs reached their apogee during this time, at one point accounting for a quarter of all FDI stocks in the US.

2. Dutch MNEs have gradually expanded their operations in the US, in response to the changing competitiveness of the US relative to the Netherlands. Thus, the extent and structure of their value added had reflected the changing motives for their investment activity and the structure of their technological specialization. Dutch FDI activity has gone from trade-supportive in the 1950s and 1960s, to import-substituting and market-seeking in the 1970s, and rationalized and efficiency seeking in the 1980s. There are also indications of a simultaneous use of strategic asset-seeking FDI activity in the late 1980s and early 1990s in line with the developments associated with the age of alliance capitalism, whereby firms are increasingly using alliances and networks as a means to develop competitive advantages.

3. The competitiveness of Dutch firms, in terms of their O advantages has also gone through a cycle, where the competitiveness of Dutch MNEs was much superior to those of their major European rivals until the mid 1980s. Since then, however, the O advantages of Dutch firms have not developed relative to those of these competitors, and this has been reflected in the declining role of Dutch manufacturing MNEs in the US economy relative to those of Switzerland, UK and Germany. Nonetheless, it is difficult to separate the effects of a re-orientation of Dutch activities towards Europe in response to increasing economic integration, from those due to the slowing down of Dutch MNEs

growth in the US due to declining competitive advantage of these firms. However, it is reasonable to expect that the pressures and attractions of the single European market would have had an equally powerful L advantage for its European competitors of other nationalities, and as such we can assume that much of the decline reflects weakening O advantages.

The analysis conducted here must be interpreted with caution. First, because we have utilized an aggregation across countries and across sectors, to analyse what is essentially a firm-specific, and in the limit, an industry-specific phenomenon. Nonetheless, given that we have made a cross-country comparison, our discussion clearly illustrates some general trends, which are valid and supported by other research, both on an aggregate, cross country basis (see e.g., Archibugi and Pianta 1992), and on a country basis (Kleinknecht 1995, Slabbers and Verspagen 1995). It should be noted that work on the activities of Dutch MNEs per se is under-represented in the literature (for an exception see Barkema, Bell and Pfennings 1996) and as such the current chapter thus represents exploratory research.

Second, and perhaps more importantly, since Dutch MNEs are concentrated in a few sectors, the detailed operating statistics on the sectoral level is limited. For reasons of confidentiality much of the detail is suppressed, since most of Dutch FDI is dominated by a few very large firms. As a result, the data is highly sensitive to the economic well-being of any one of these firms. In other words, the competitiveness of Dutch firms in many instances represents the competitiveness (or the lack thereof) of a handful of firms, and in some sectors, just one conglomerate. Nonetheless, this state of affairs mirrors that of the Dutch economy, where 6 firms[27] account for 16.3 percent of total industrial employment in 1987 (Belderbos 1989).

It should be stressed that the decline of manufacturing content of Dutch FDI activity, and the subsequent growth of investments in services is in itself not surprising. Along with most other developed countries, both the Dutch and the US economy have moved towards a services based economy. The service sector accounted for 70.0 percent and 72.0 percent of the GDP of the Netherlands and the US in 1995, compared to 64.0 percent for both countries in 1980 (World Bank 1997). Indeed, service MNEs such as ING, ABN AMRO, Ahold, and Aegon have been investing aggressively in the US in order to attain market share, particularly through M&A activity. Indeed, between 1990

and 1995, Dutch FDI stock in services has increased by a factor of 1.3, and the sales of these firms accounted for 34.6 percent of all sales by Dutch affiliates and 4.2 percent of all service sales by foreign affiliates the US, up from 30.0 percent and 3.7 percent respectively in 1987. In terms of assets, 57.0 percent of all Dutch assets[28] were in service in 1994, compared with 29.6 percent in 1987. Less than 36.6 percent of the total investment outlays between 1987 and 1995 by Dutch firms were in manufacturing. This restructuring does not necessarily represent a negative event, but a logical and long expected outcome as we move into a post-industrial era. Furthermore, manufacturing MNEs from the Triad have gradually been relocating their more labour intensive and lower value adding aspects of their manufacturing establishments to industrialising and developing economies which still have a comparative advantages in these activities. However, there is some reason for concern when the high-value adding activity and skills intensive aspects of manufacturing such as R&D and computer aided manufacturing are relocated to other Triad countries rather than remaining in the Netherlands.

As recently evaluated by a survey produced by IMD (the world competitiveness yearbook 1997), the Netherlands ranks 6th in the world, 4th among OECD countries, and third in Europe, following Finland and Norway. It is difficult to do any statements about the future of Dutch MNEs on the basis of these data because the yearbook evaluates the competitive strength of the whole economy. It measures, among other things, several aspects of the domestic economy, government activity, finance, and science and technology indicators, but no company specific information is given in the report. Therefore the survey must be interpreted with caution. However, at the present time there is insufficient evidence for alarm, as the Netherlands remains one of the most competitive economies in Europe.

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ENDNOTES

1. Strategic asset seeking MNE activity is originally hinted at in the work by Knickerbocker (1973).

2. For an in-depth discussion of the tertiarisation of industrial economies, see Bellak (1993). This line of thought derives itself from the work of Chenery and Taylor (1968).

3. Howenstine and Shannon (1996) and Howenstine and Zeile (1994).

4. Data in this paper are based on the various publications of the US Department of Commerce, rather than De Nederlandsche Bank, unless otherwise stated.

5. All FDI stock figures used here are in current US dollars, based on historical cost estimates.

6. Prior to 1972, the EEC consisted of Germany, France, Netherlands, Belgium, Luxembourg and Italy.

7. Exports in the primary sector from the US were over 30% of total US exports in 1960 (Statistical Abstract of the United States, 1982-1983, US Department of Commerce).

8. Secretariaat-Generaal van de Benelux Economische Unie (1981) Benelux 1948-1979 Statistieken - Tijdreeksen.

9. The first year for which the US Department of Commerce published sectoral data for a considerable number of countries again.

10 . Due to the abolition of the gold standard, exchange rate movements were large, leading to large depreciations of the US$ against the other currencies. For example, in June 1973 the Mark appreciated more than 11% against the US dollar.

11. It is to be noted that from 1974, inward FDI was reclassified from a threshold of 25% of foreign ownership to 10% ownership. However, this does not severely affect the comparison, as the change led to a 5% increase in the direct investment stock position in 1974.

12. There was a sudden increase in Dutch manufacturing stock in 1981, when it doubled its 1980 value. It is interesting to note that although investments expanded, most Dutch firms report difficulties with sales in the US in 1981, due to the recession, in their annual reports.

13. Northwest Europe, based on the usage of van Ark (1996: 20) implies the following countries: Austria, Denmark, Finland, Germany, Netherlands, Norway, Sweden, Switzerland and UK. Figures are annual compound growth rates.

14. For example the sales of Dutch affiliates in the US (based on the US Department of Commerce, Benchmark Survey and FDI data) are divided by total US commodity imports from the Netherlands (based on the UN commodity trade statistics). In specific sectors, we divided the sales of the Dutch affiliate in that particular sector by total US imports of commodities in this sector.

15. The low sales to imports ratio is not a typical characteristic of the industry - this same ratio for the UK was 12 times that of the Dutch ratio (Table 5), indicating that it represents a firm or country-specific difference.

16. Although for Dutch and UK firms in the chemicals sector there was a continuing improvement in the L advantages of the US. However, these countries do not reveal any competitive strength in this specific sector. The Netherlands started off having a revealed comparative advantage (RCA) in chemicals at the beginning of the 1980s, but over the decade it declined. It strength in primary and fabricated metals and transportation remains and has grown larger. The non-electrical machinery and the electrical machinery sectors both show a relatively large RCA, but it is declining over time.

17. For a discussion, see Duysters and Sadowski, chapter 7 in R. van Hoesel and R. Narula (eds.) (1988) Multinational Enterprises from the Netherlands, Routledge: London, forthcoming.

18. For instance, Japanese firms accounted for 11% of the European automobile market in 1990 (Narula and Gugler, 1991).

19. Analysis is based on van Ark and de Jong (1996) who used GDP per capita data in constant 1990 prices. To make a country comparison, we used World Bank GDP data in constant 1987 prices.

20. Quite surprisingly, Unilever actually expanded its food and kindred activities by acquiring ice-cream companies that turned out to increase their sales over the next years. At the same time Unilever sales in detergents declined severely all over the world, due to the OMO Power incident. In 1994 CSM also expanded its activities in the US by a takeover of Henry and Henry in New York State. These acquisitions contrast the sales data, although one should realize that most acquisitions are finalized at the end of the year and sometimes sales by these new firms are not reported until the next year.

21. Unfortunately the data do not allow a thorough analysis of what happened to Philips. For reasons of confidentiality, the data are suppressed in publications of the US Department of Commerce. However, it is well known that Philips performed massive restructuring of its activities during this period.

22. R&D intensity is just one of the indicators of the innovativeness of a country. One can also consider output indicators such as patents, or productivity growth. There is some debate about the relevance of R&D-statistics as indicators of innovation. One school of thought (see Snijders) emphasizes that R&D expenditure is an input indicator, not taking into account other factors like education. Furthermore, R&D intensity is influenced by the size of the country, the sectoral structure, and with increasing globalization it is common that the fruits of R&D activity occur in a different country than where that where expenditure is made. Another school of thought (see Verspagen) refutes this critique by explaining the economic justification for using R&D intensity, namely the external effects that occur, eventually leading to economic growth.

23. Data for electrical machinery for German MNEs was for 1992.

24. See also Cantwell and Janne, chapter 4 in R. van Hoesel and R. Narula (eds.) (1988) Multinational Enterprises from the Netherlands, Routledge: London, forthcoming.

25. The study compared innovations in “new” products and “imitative” products. New products are those which have were not earlier introduced by competitors. The countries compared are Netherlands, Ireland, Norway, Denmark, West Germany and Austria.

26. For an elaborate discussion see Duysters and Sadowski, Chapter 7 in R. van Hoesel and R. Narula (eds.) (1988) Multinational Enterprises from the Netherlands, Routledge: London, forthcoming.

27. Philips, Royal Dutch/Shell, Unilever, Akzo, DSM, and Hoogovens.

28. Includes assets in the following sectors: wholesale trade, retail trade, finance except depository institutions, insurance, real estate and other services.